

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/006,583

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A method of providing the communication between two or more control units of a control apparatus that controls at least one electronic device which comprises two or more peripheral units, wherein the method comprises the steps of:

providing a common bus;

connecting the two or more control units of the control apparatus through said common bus;

controlling, through each control unit, at least one peripheral unit of the device to provide data essential to the operation of the peripheral unit and to detect possible data variations in said peripheral unit; and

providing a master controller connected to the common bus

and further the steps, carried out by each of said control units, of:

submitting information concerning the consumed data consumed and those provided by the peripheral units controlled by said each control units, to said master control (CONT); and

sending a message (M) over the bus (BUS) whenever at least one of the data provided by the peripheral units controlled by said each control units varies.

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2. (Currently amended) A method according to claim 1, wherein the step of submitting information to the master controller comprises the step of each control unit transmitting to the master controller ~~the a~~ structure of its own message comprising at least one of information provided and/or and information ~~econsumed/acquired~~received and used.

3. (Original) A method according to claim 1, wherein it further comprises the step of assigning a suitable address to each of said control units.

4. (Currently amended) A method according to claim 1 wherein the step of sending a message comprises the step of sending a message comprising a first portion and a second portion, said first message portion comprising information concerning the control unit that has detected a data variation in the ~~controlled~~data of at least one peripheral unit/units controlled thereby and information concerning the control units that will consume the ~~transmitted~~ data in the sent message.

5. (Currently amended) A method according to claim 4, wherein the information concerning the control units that will consume the ~~transmitted~~ data in the sent message comprise a logic address for representing a group of control units consuming the same data item.

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6. (Currently amended) A method according to claim 1, wherein it comprises the additional step of providing each control unit with a counter that counts forward at each message sent by said each control unit.

7. (Currently amended) A method according to claim 6, wherein it further comprises the step of writing the value of said counter into every message ~~taht~~that is sent by said each control unit.

8. (Currently amended) A method according to claim 1, wherein the step of sending a message comprises the step of sending a message comprising at least one control bit to control the regularity of the information exchange.

9. (Original) A method according to claim 1, wherein it further comprises the additional step of disabling said master controller after having established the communication between said control units.

10. (Currently amended) A method according to claim 1, wherein said device is a device for receiving, ~~transmitting~~ and processing signals in radio link systems.

11. (Currently Amended) An apparatus for controlling an electronic device which comprises two or more peripheral units, the apparatus comprising:

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at least two or more control units, each control unit controlling at least one peripheral unit of the device to provide data necessary for the operation of the peripheral unit and detect possible data variations of said peripheral unit;

a common bus (BUS) for connecting said two or more control units (C);

wherein the apparatus further comprises a master controller (CONT) connected to the common bus (BUS) and wherein there are provided, in each control unit:

means for submitting, to said master controller (CONT), information concerning the consumed data consumed and the ones provided by the peripheral units that are controlled by said each control units; and

means for sending a message (M) whenever in response to a variation of at least one of the data provided by the peripheral units controlled by said each control units varies.

12. (Currently amended) An apparatus according to claim 11, wherein said device is a device for receiving/transmitting and processing signals in radio link systems.

13. (Currently amended) A computer program comprising program code means adapted to perform one or more of the steps of the method according to claim 1 when said program is run on a computer.

14. (Currently amended) A computer-readable medium having a program recorded thereon, said computer readable medium comprising computer program code means adapted to

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perform ~~one or more of~~the steps of the method according to claim 1 when said program is run on a computer.